

Office #2
9/9/2001Serial Number: 09/910,087

Edited by:

Verified by:

(STIC stat)

ENTERED Changed a file from non-ASCII to ASCII Changed the margins in cases where the sequence text was "wrapped" down to the next line. Edited a format error in the Current Application Data section, specifically: Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other _____. Added the mandatory heading and subheadings for "Current Application Data". Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer. Changed the spelling of a mandatory field (the headings or subheadings), specifically: Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place. Inserted colons after headings/subheadings. Headings edited included: _____ Deleted extra, invalid, headings used by an applicant, specifically: Deleted: non-ASCII "garbage" at the beginning/end of lines; secretary initials/initials at end of file; page numbers throughout text; other invalid text, such as _____ Inserted mandatory headings, specifically: Corrected an obvious error in the response, specifically: Edited identifiers where upper case is used but lower case is required, or vice versa. Corrected an error in the Number of Sequences field, specifically: A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted. Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____ Other: _____Examiner: The above corrections must be communicated to the applicant in the first Office
Action. DO NOT send a copy of this form.

3/195

RAW SEQUENCE LISTING DATE: 09/09/2001
PATENT APPLICATION: US/09/910,087 TIME: 18:50:52

Input Set : A:\Pto.amc
Output Set: N:\CRF3\09072001\I910087.raw

SEQUENCE LISTING

C--> 5 (1) GENERAL INFORMATION:
7 (i) APPLICANT: Koopman, Peter
8 Goodfellow, Peter
C--> 10 (ii) TITLE OF INVENTION: SOX-9 GENE AND PROTEIN AND
11 USE IN THE REGENERATION OF BONE OR CARTILAGE
13 (iii) NUMBER OF SEQUENCES: 21
15 (iv) CORRESPONDENCE ADDRESS:
16 (A) ADDRESSEE: Scully, Scott, Murphy & Presser
17 (B) STREET: 400 Garden City Plaza
18 (C) CITY: Garden City
19 (D) STATE: NY
20 (E) COUNTRY: U.S.A.
21 (F) ZIP: 11530
23 (v) COMPUTER READABLE FORM:
24 (A) MEDIUM TYPE: Diskette
25 (B) COMPUTER: IBM Compatible
26 (C) OPERATING SYSTEM: DOS
27 (D) SOFTWARE: FastSEQ Version 1.5
29 (vi) CURRENT APPLICATION DATA:
C--> 30 (A) APPLICATION NUMBER: US/09/910,087
C--> 31 (B) FILING DATE: 20-Jul-2001
32 (C) CLASSIFICATION:
34 (vii) PRIOR APPLICATION DATA:
35 (A) APPLICATION NUMBER: AU PM9714
36 (B) FILING DATE: 29-NOV-1994
38 (A) APPLICATION NUMBER: AU PM9835
39 (B) FILING DATE: 05-DEC-1994
41 (A) APPLICATION NUMBER: PCT/AU95/00799
42 (B) FILING DATE: 29-NOV-1995
44 (viii) ATTORNEY/AGENT INFORMATION:
45 (A) NAME: DiGiglio, Frank S.
46 (B) REGISTRATION NUMBER: 31,346
47 (C) REFERENCE/DOCKET NUMBER: 10981
49 (ix) TELECOMMUNICATION INFORMATION:
50 (A) TELEPHONE: 516-742-4343
51 (B) TELEFAX: 516-742-4366
52 (C) TELEX:
53 (2) INFORMATION FOR SEQ ID NO: 1:
55 (i) SEQUENCE CHARACTERISTICS:
56 (A) LENGTH: 7 base pairs
57 (B) TYPE: nucleic acid
58 (C) STRANDEDNESS: single
59 (D) TOPOLOGY: linear
61 (ii) MOLECULE TYPE: cDNA
63 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
65 AATTAAA

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68 (2) INFORMATION FOR SEQ ID NO: 2:
70 (i) SEQUENCE CHARACTERISTICS:
71 (A) LENGTH: 19 base pairs
72 (B) TYPE: nucleic acid
73 (C) STRANDEDNESS: single
74 (D) TOPOLOGY: linear
76 (ii) MOLECULE TYPE: cDNA
78 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
80 CCAAAGTCCT AAAGGTGGG 19
83 (2) INFORMATION FOR SEQ ID NO: 3:
85 (i) SEQUENCE CHARACTERISTICS:
86 (A) LENGTH: 19 base pairs
87 (B) TYPE: nucleic acid
88 (C) STRANDEDNESS: single
89 (D) TOPOLOGY: linear
91 (ii) MOLECULE TYPE: cDNA
93 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
95 TTTCAGGCAA ATAAGGCAG 19
98 (2) INFORMATION FOR SEQ ID NO: 4:
100 (i) SEQUENCE CHARACTERISTICS:
101 (A) LENGTH: 20 base pairs
102 (B) TYPE: nucleic acid
103 (C) STRANDEDNESS: single
104 (D) TOPOLOGY: linear
106 (ii) MOLECULE TYPE: cDNA
108 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
110 TGGCAATCTA ACAGATGAGA 20
113 (2) INFORMATION FOR SEQ ID NO: 5:
115 (i) SEQUENCE CHARACTERISTICS:
116 (A) LENGTH: 20 base pairs
117 (B) TYPE: nucleic acid
118 (C) STRANDEDNESS: single
119 (D) TOPOLOGY: linear
121 (ii) MOLECULE TYPE: cDNA
123 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
125 TCNCAAATGT CATATATCCA 20
128 (2) INFORMATION FOR SEQ ID NO: 6:
130 (i) SEQUENCE CHARACTERISTICS:
131 (A) LENGTH: 22 base pairs
132 (B) TYPE: nucleic acid
133 (C) STRANDEDNESS: single
134 (D) TOPOLOGY: linear
136 (ii) MOLECULE TYPE: cDNA
138 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
140 AGTCCAGATT GACTGGAACA CA 22
143 (2) INFORMATION FOR SEQ ID NO: 7:
145 (i) SEQUENCE CHARACTERISTICS:
146 (A) LENGTH: 24 base pairs
147 (B) TYPE: nucleic acid

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148 (C) STRANDEDNESS: single
149 (D) TOPOLOGY: linear
151 (ii) MOLECULE TYPE: cDNA
153 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
155 GCAATAAGAT ACTAATATGT AGAG 24
157 (2) INFORMATION FOR SEQ ID NO: 8:
159 (i) SEQUENCE CHARACTERISTICS:
160 (A) LENGTH: 20 base pairs
161 (B) TYPE: nucleic acid
162 (C) STRANDEDNESS: single
163 (D) TOPOLOGY: linear
165 (ii) MOLECULE TYPE: cDNA
167 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
169 GTCAGCAGAA ATCCTAAAGG 20
172 (2) INFORMATION FOR SEQ ID NO: 9:
174 (i) SEQUENCE CHARACTERISTICS:
175 (A) LENGTH: 20 base pairs
176 (B) TYPE: nucleic acid
177 (C) STRANDEDNESS: single
178 (D) TOPOLOGY: linear
180 (ii) MOLECULE TYPE: cDNA
182 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
184 GACTAATGCC GATGGTTAAG 20
187 (2) INFORMATION FOR SEQ ID NO: 10:
189 (i) SEQUENCE CHARACTERISTICS:
190 (A) LENGTH: 20 base pairs
191 (B) TYPE: nucleic acid
192 (C) STRANDEDNESS: single
193 (D) TOPOLOGY: linear
195 (ii) MOLECULE TYPE: cDNA
197 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
199 CGCCTCGAGG TGGCTTATCG 20
202 (2) INFORMATION FOR SEQ ID NO: 11:
204 (i) SEQUENCE CHARACTERISTICS:
205 (A) LENGTH: 25 base pairs
206 (B) TYPE: nucleic acid
207 (C) STRANDEDNESS: single
208 (D) TOPOLOGY: linear
210 (ii) MOLECULE TYPE: cDNA
212 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
214 ATCATACACA TACGATTTAG GTGAC 25
217 (2) INFORMATION FOR SEQ ID NO: 12:
219 (i) SEQUENCE CHARACTERISTICS:
220 (A) LENGTH: 19 base pairs
221 (B) TYPE: nucleic acid
222 (C) STRANDEDNESS: single
223 (D) TOPOLOGY: linear
225 (ii) MOLECULE TYPE: cDNA
227 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

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PATENT APPLICATION: US/09/910,087

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229 GAGGAAGTCG GTGAAGAAC 19
 232 (2) INFORMATION FOR SEQ ID NO: 13:
 234 (i) SEQUENCE CHARACTERISTICS:
 235 (A) LENGTH: 21 base pairs
 236 (B) TYPE: nucleic acid
 237 (C) STRANDEDNESS: single
 238 (D) TOPOLOGY: linear
 240 (ii) MOLECULE TYPE: cDNA
 242 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
 244 TCGCTCATGC CGGAGGAGGA G 21
 247 (2) INFORMATION FOR SEQ ID NO: 14:
 249 (i) SEQUENCE CHARACTERISTICS:
 250 (A) LENGTH: 21 base pairs
 251 (B) TYPE: nucleic acid
 252 (C) STRANDEDNESS: single
 253 (D) TOPOLOGY: linear
 255 (ii) MOLECULE TYPE: cDNA
 257 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
 259 GCAATCCAG GGCCCACCGA C 21
 261 (2) INFORMATION FOR SEQ ID NO: 15:
 263 (i) SEQUENCE CHARACTERISTICS:
 264 (A) LENGTH: 22 base pairs
 265 (B) TYPE: nucleic acid
 266 (C) STRANDEDNESS: single
 267 (D) TOPOLOGY: linear
 269 (ii) MOLECULE TYPE: cDNA
 271 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
 273 TTGGAGATGA CGTCGACTGC TC 22
 276 (2) INFORMATION FOR SEQ ID NO: 16:
 278 (i) SEQUENCE CHARACTERISTICS:
 279 (A) LENGTH: 20 base pairs
 280 (B) TYPE: nucleic acid
 281 (C) STRANDEDNESS: single
 282 (D) TOPOLOGY: linear
 284 (ii) MOLECULE TYPE: cDNA
 286 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
 288 GCAGCGACGT CATCTCCAAC 20
 291 (2) INFORMATION FOR SEQ ID NO: 17:
 293 (i) SEQUENCE CHARACTERISTICS:
 294 (A) LENGTH: 21 base pairs
 295 (B) TYPE: nucleic acid
 296 (C) STRANDEDNESS: single
 297 (D) TOPOLOGY: linear
 299 (ii) MOLECULE TYPE: cDNA
 301 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
 303 GCTGCTTGGAA CATCCACACG T 21
 306 (2) INFORMATION FOR SEQ ID NO: 18:
 308 (i) SEQUENCE CHARACTERISTICS:
 309 (A) LENGTH: 2249 base pairs

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PATENT APPLICATION: US/09/910,087

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TIME: 18:50:52

Input Set : A:\Pto.amc
Output Set: N:\CRF3\09072001\I910087.raw

310 (B) TYPE: nucleic acid
311 (C) STRANDEDNESS: single
312 (D) TOPOLOGY: linear
314 (ii) MOLECULE TYPE: cDNA
316 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
318 AGTTTCAGTC CAGGAACCTT TCTTTGCAAG AGAGACGAGG TGCAAGTGGC 50
320 CCCGGTTTCG TTCTCTGTT TCCCCTCCCTC CTCCCTCCGCT CCGACTCGCC 100
322 TTCCCCGGGT TTAGAGCCGG CAGCTGAGAC CCGCCACCCA GCGCCTCTGC 150
324 TAAGTGCCCG CCGCCGCAGC CCGGTGACGC GCCAACCTCC CCGGGAGCCG 200
326 TTCGCTCGGC GTCCCGTCC GGGCAGCTGA GGGAAAGAGGA GCCCCAGCCG 250
328 CCGCGGCTTC TCGCCTTCC CGGCCACCCG CCCCCCTGCC CCGGCTCGCG 300
330 TATGAATCTC CTGGACCCCT TCATGAAGAT GACCGACGAG CAGGAGAAGG 350
332 GCCTGTCTGG CGCCCCCAGC CCCACCATGT CGGAGGACTC GGCTGGTTCG 400
334 CCCTGTCCCT CGGGCTCCGG CTCGGACACG GAGAACACCC GGCCCCAGGA 450
336 GAACACCTTC CCCAAGGGCG AGCCGGATCT GAAGAAGGAG AGCGAGGAAG 500
338 ATAAGTTCCC CGTGTGCATC CGCGAGGCCG TCAGGCCAGGT GCTGAAGGGC 550
340 TACGACTGGA CGCTGGTGC CATGCCCGTG CGCGTCAACG GCTCCAGCAA 600
342 GAACAAGCCA CACGTCAAGC GACCCATGAA CGCCTTCATG GTGTGGCGC 650
344 AGGCTGCGCG CAGGAAGCTG GCAGACCACT ACCCGCATCT GCACAAACGCG 700
346 GAGCTCAGCA AGACTCTGGG CAAGCTCTGG AGGCTGCTGA ACGAGAGCGA 750
348 GAAGAGACCC TTCTGGAGG AGGCAGGCCG GCTGCGCGTG CAGCACAAAGA 800
350 AAGACCACCC CGATTACAAG TACCAGCCCC GGCGGAGGAA GTCGGTGAAG 850
352 AACGGACAAG CGGAGGCCGA AGAGGCCACG GAACAGACTC ACATCTCTCC 900
354 TAATGCTATC TTCAAGGCGC TGCAAGCCGA CTCCCCACAT TCCTCCTCCG 950
356 GCATGAGTGA GGTGCACTCC CGGGCGAGC ACTCTGGGCA ATCTCAGGGT 1000
358 CCGCCGACCC CACCCACCA TCCCCAAACC GACGTGCAAG CTGGCAAAGT 1050
360 TGATCTGAAG CGAGAGGGGC GCCCCTCTGGC AGAGGGGGGC AGACAGCCCC 1100
362 CCATCGACTT CCGCGACGTG GACATCGGTG AACTGAGCAG CGACGTCACTC 1150
364 TCCAACATTG AGACCTTCGA CGTCAATGAG TTTGACCAAT ACTTGCCACC 1200
366 CAACGGCCAC CCAGGGGTTC CGGCCACCCA CGGGCAGGTC ACCTACACTG 1250
368 GCAGTTACGG CATCAGCAGC ACCGCACCCA CCCCTGCGAC CGCGGGCCAC 1300
370 GTGTGGATGT CGAACGAGCA GGCGCCGCC CCTCCTCCGC AGCAGCCTCC 1350
372 GCAGGCCCG CAAGCCCCAC AGGCGCCTCC GCAGCAGCAA GCACCCCCGC 1400
374 AGCAGCCGCA GGCACCCCG CAGCAGCAGG CACACACGCT CACCACGCTG 1450
376 AGCAGCGAGC CAGGCCAGTC CCAGCGAACG CACATCAAGA CGGAGCAGCT 1500
378 GAGCCCCAGC CACTACAGGG AGCAGCAGCA GCACCTCCCCG CAACAGATCT 1550
380 CCTACAGCCC CTTCAACCTT CCTCACTACA GGCCCTCCTA CCCGCCATC 1600
382 ACCCGTTCGG AATACGACTA CGCTGACCAT CAGAACTCCG GCTCCTACTA 1650
384 CAGTCACGCA GCCGGCCAGG GCTCAGGGCT CTACTCCACC TTCACTTACA 1700
386 TGAACCCCCGC GCAGCGCCCC ATGTACACCC CCATCGGTGA CACCTCCGGG 1750
388 GTCCCTTCCA TCCCGCAGAC CCACAGCCCC CAGGACTGGG AACAAACAGT 1800
390 CTACACACAG GTCACCCAGAC CCTGAGAAGA GAAAAGCTAT GGTGACAGAG 1850
392 CTGATCTTTT TTTTTTTTT TTTTTAAAGA AGAAAAGAAA GAAACGAAAAA 1900
394 AGAAAAAAGCT GAAGGAAATC AAGAACCAAT TGAAATTCCCT TTGGACACTT 1950
396 TTTTTTTTGT CCTTCGTTA ATTTTTAAAA GACATGTAAA GGAAGGTAAC 2000
398 GATTGCTGGG CATTCCAGGA GAGAGACTTT AAGACTTTGT CTGAGCTCAT 2050
400 GACAACATAT TGCAAATGGC CGGGCCACTC GTGGCCAGAC GGACAGCACT 2100
402 CCTGGCCAGA TGGACCCACC AGTATCAGCG AGGAGGGCT TGTCTCCTTC 2150
404 AGAGTTAACCA TGGAGGACGA TTGGAGAATC TCCCTGCCTG TTTGGACTTT 2200

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/910,087

DATE: 09/09/2001

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Output Set: N:\CRF3\09072001\I910087.raw

L:5 M:220 C: Keyword misspelled or invalid format, [(1) GENERAL INFORMATION:]
L:10 M:220 C: Keyword misspelled or invalid format, [(ii) TITLE OF INVENTION:]
L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:417 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19